

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 through 69. (Cancelled).

70. (Amended currently) A system comprising:  
an ultrasound transducer; responsive to an ultrasound generator to produce ultrasound;  
~~an ultrasound sensor;~~ and  
a central processing unit regulating said ultrasound generator;  
wherein said central processing unit adjusts a frequency or an intensity of said ultrasound in response to a signal from said sensor.

71. (Amended currently) The system of claim 70, ~~comprising more than one~~ wherein said sensor measures a parameter of a sample.

72. (Amended currently) The system of claim 71, ~~comprising more than one type of sensor~~ wherein said parameter is selected from the group consisting of:

a temperature,

a size,

a type,

a density, and

an infrared temperature.

73. (Amended currently) The system of claim 74, ~~comprising an~~ wherein said sensor is selected from the group consisting of:

an ultrasound sensor, and

an infrared temperature sensor.

74. (Amended currently) The system of claim 70, ~~comprising more than one transducer~~ wherein said sensor measures a frequency or an intensity of said ultrasound.

75. (Original) The system of claim 70 wherein said sensor produces readings which are processed by said central processing unit.

76. (Original) The system of claim 70 wherein said ultrasound generator is controlled by said central processing unit.

77. (Original) The system of claim 70 wherein said transducer generates ultrasound of a

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frequency of at least 100 KHz.

78. (Original) The system of claim 77 wherein said transducer generates ultrasound of a single frequency or of multiple frequencies in the range 100 KHz to 50 MHz.

79. (Original) The system of claim 70 wherein said ultrasound transducer produces ultrasound of a power in the range of 0.01-200 W/cm<sup>2</sup>.

80 through 91. (Cancelled).